Arima(order=c(1, 0, 0), seasonal=c(1, 0, 0), method="CSS", xreg=fourier(., K=3)) on full 1hrs ph2

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Parameters

Series: **1hrs ph2**.

Model: **Arima(order=c(1, 0, 0), seasonal=c(1, 0, 0), method="CSS", xreg=fourier(., K=3))**.

Transformation: **identity()**.

As observations: **FALSE**.

Train days: **4**.

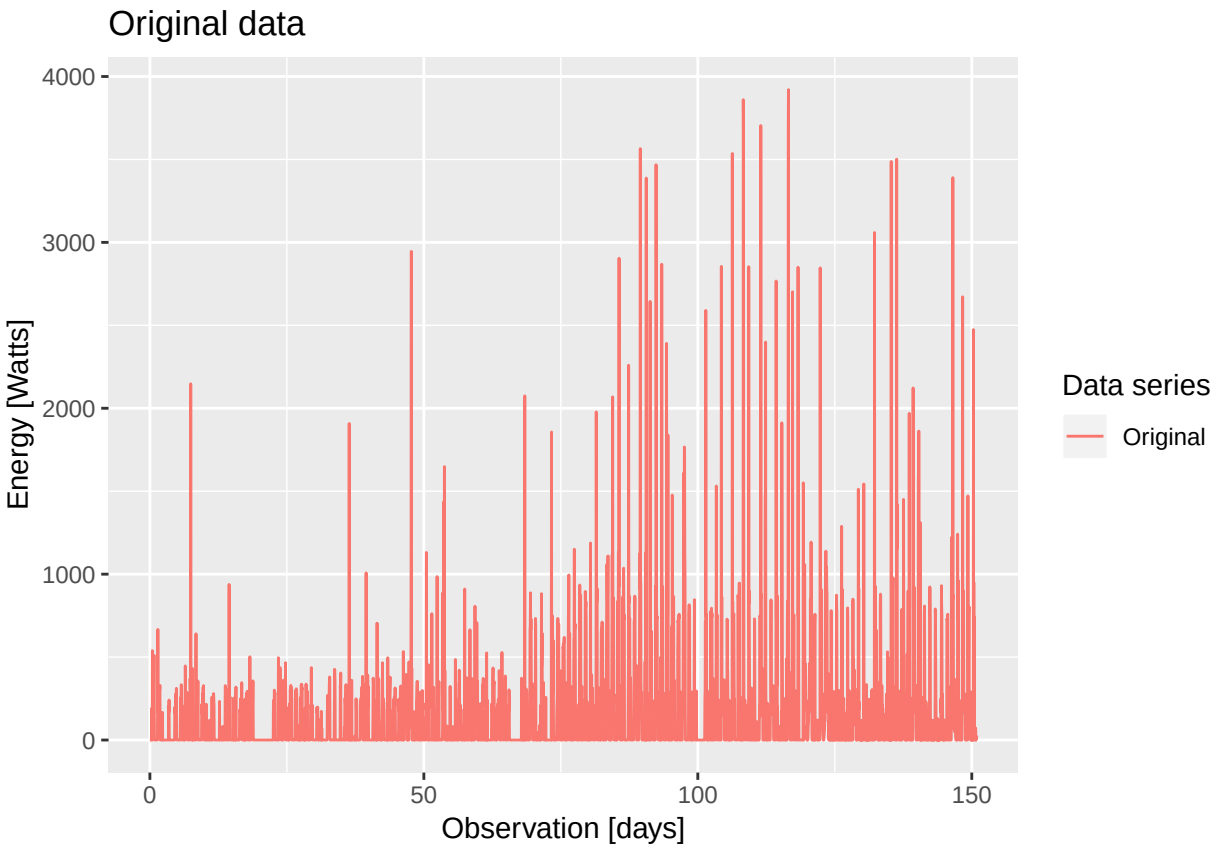
Test days: **3**.

xreg: **fourier(., h=h, K=3)**.

Parallel processing: **TRUE**.

Original data

The data has been previously cleaned, negative values were made 0.



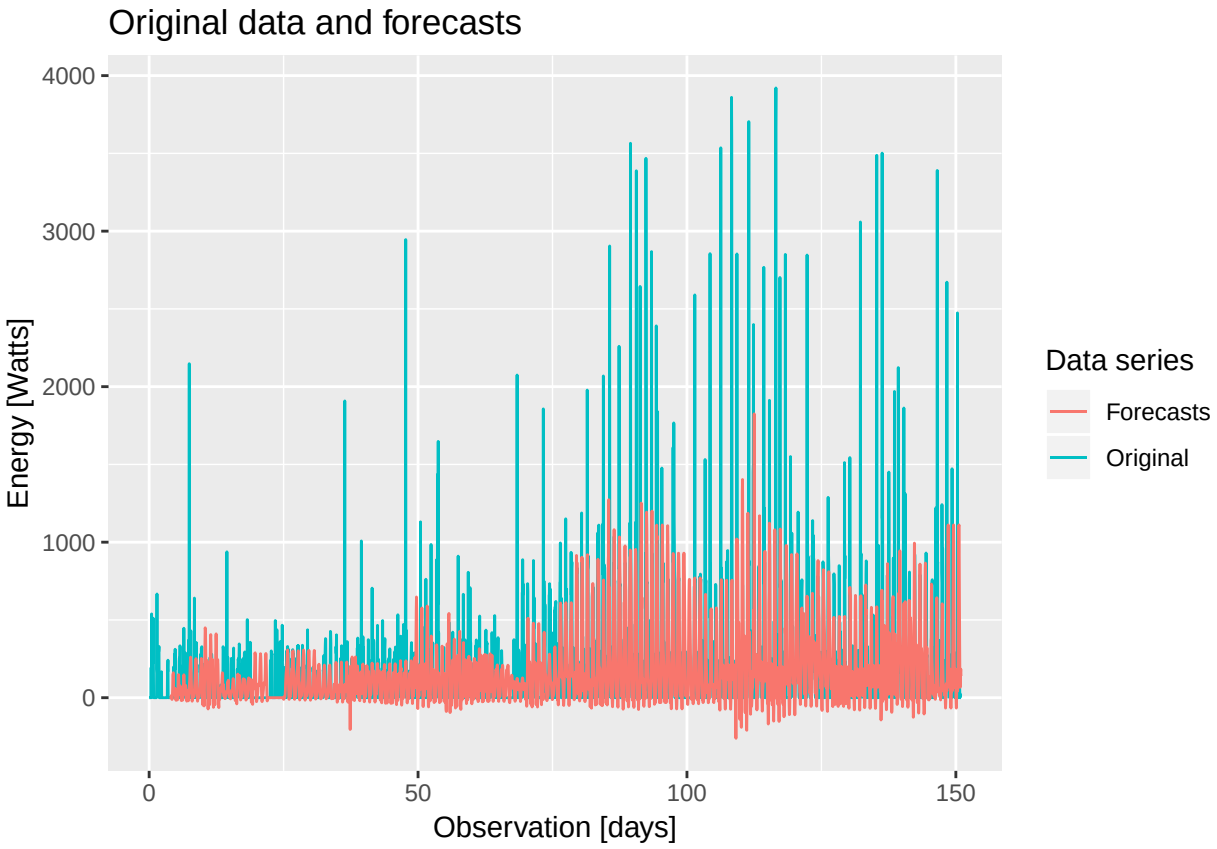
Total data points: **3623** representing **151** days.

Number of data points per day: **24** (gathered once every **60** minutes).

Forecast data

Time elapapsed for forecasting **147** days (representing 3528 data points), initial training data not taken into account: **4.45** seconds (**0.0741667** minutes).

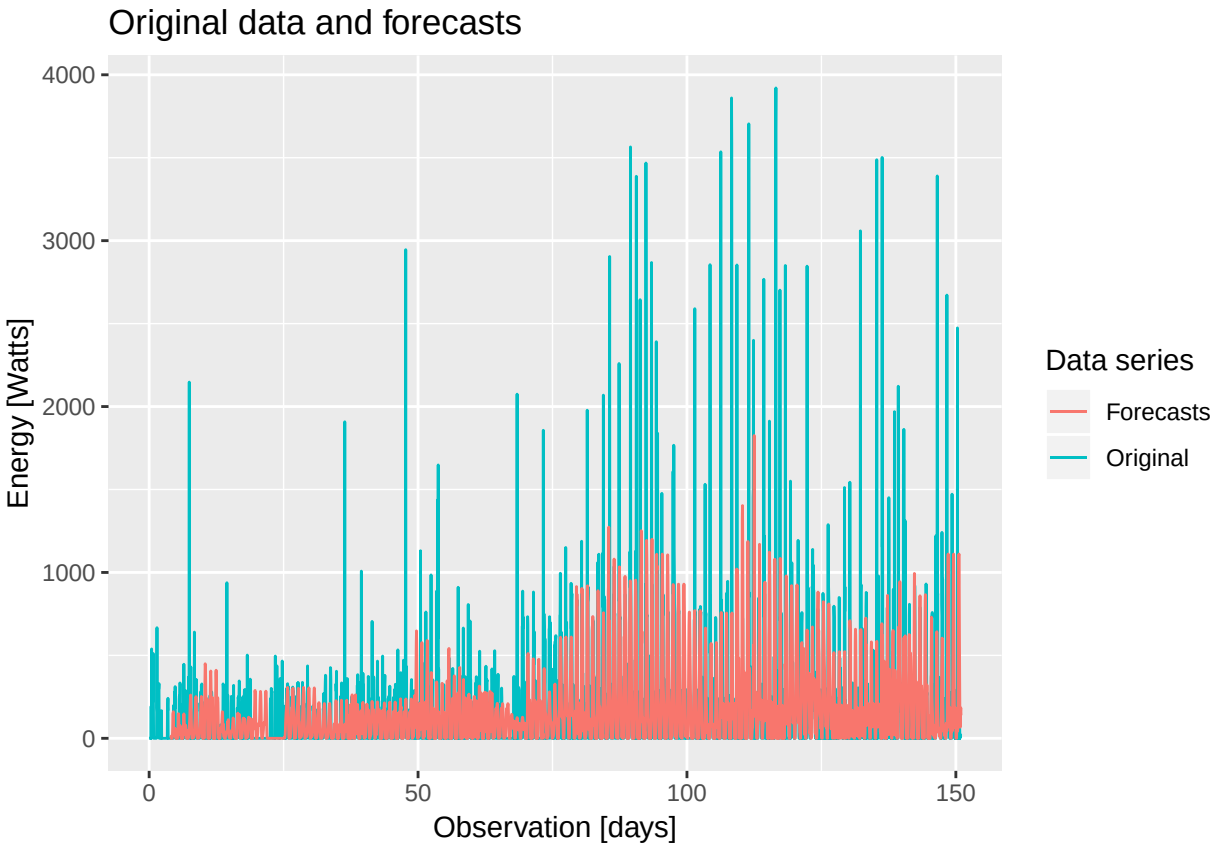
Forecasts (un-adjusted) plot against the data



Accuracy of the un-adjusted forecasts against the data

	ME	RMSE	MAE	MPE	MAPE	ACF1	Theil's U
Test set	2.17879	351.6455	171.3165	NaN	Inf	0.2672462	NaN

Forecasts (adjusted) plot against the data



Accuracy of the adjusted forecasts against the data

	ME	RMSE	MAE	MPE	MAPE	ACF1	Theil's U
Test set	-3.373738	350.7651	165.764	-Inf	Inf	0.2659793	0

Future work

- Some models (e.g. with fourier terms for the seasonality) may go into the negative values, this cannot be taken care of during the modelling/forecasting phase with these kind of models (since we cannot control the ampitude of the seasonality in each point) and would have to be corrected after forecasting in order to replace all negative values with zeros